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ETHIOPIA

**STUDY OF MANPOWER NEEDS, EDUCATIONAL CAPABILITIES,
AND OVERSEAS STUDY**

Report Number 6

**Study Committee on
Manpower Needs and
Educational Capabilities
in Africa**

July 22, 1965

**A. I. D. INDUSTRIAL AND
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Errata

page

10	Table 2	Percentage for academic secondary schools should be 3.10%.
14	line 16	Should read: "7.3 per cent".

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ETHIOPIA

Report Number 6

FOREWORD

Frame of Reference for This Report

This report, based on a survey of Ethiopia made during the fall and winter of 1964-65, is submitted in partial fulfillment of USAID Contract AID/afr-198 dated June 2, 1964.¹ The study, undertaken at the request of AID, includes the following: (1) an assessment of available data concerning high-level manpower needs,² (2) an appraisal of the capabilities of indigenous African educational institutions to meet those manpower needs, and (3) a survey of opportunities for study overseas as they relate to high-level manpower needs. The data and conclusions from this study are intended to provide information and guidance useful to the Bureau for Africa in the programming of technical and economic assistance.

¹This report is one of nine country studies: Ethiopia, Guinea, Kenya, Liberia, Nigeria, Sudan, Tanzania, Tunisia, and Uganda. In addition, a summary report containing general conclusions and recommendations based on the individual country reports is being submitted to AID.

²The term "high-level manpower" has been given different meanings. As used in these reports, it generally includes two categories: (1) Class A occupations, which are those requiring a university education or its equivalent; and (2) Class B occupations, which require two or three years of post-secondary training or its equivalent. Other categories which require less training were not examined closely, although some attention was given to middle-level or Class C occupations, which require secondary school education or the equivalent.

The study director and members of the study committee are grateful to the many individuals in Ethiopia and elsewhere who gave generously of their time, sharing their experience and providing advice and guidance. They particularly wish to thank members of the EWA staff who assisted directly in the preparation of this report: Sally V. Allen, Patricia Mulvey, Rhoda Pauley, and James R. Sheffield.

John W. Masland
Director of the Study

INTRODUCTION

From Isolation to Modernization

Ethiopia occupies a unique position in modern Africa. The Ethiopian empire traces its origin from the legendary union of King Solomon and the Queen of Sheba. Long isolated from its neighbors by topography, the empire has been free from foreign domination, except when it was occupied by Italian troops from 1936-1941.

Isolation has proved a mixed blessing, however. When Haile Sellassie I became Emperor in 1930, the country's material and human resources were almost totally undeveloped. Since that time the Emperor's considerable effort to spur the economic and social development of the country has enabled Ethiopia to become a leader among the emerging African nations. And, largely because of the Emperor's personal efforts, Addis Ababa has become a regional center of international activity, serving as the headquarters of both the Economic Commission for Africa and the Organization for African Unity.

There is, however, much political instability underneath the surface unity. Although Ethiopia is a large country, containing nearly 22 million people in 450,000 square miles, the gross national product of \$925 million in 1963 reveals that the empire is far from wealthy.¹ Moreover, Ethiopia, like most African countries, is ruled by an elite which represents a small racial, tribal, and religious minority highly concentrated within several cities. In Ethiopia, a minority group still controls political decisions and also, as a result, the distribution of jobs, schools, and scholarships. With the growth of education, however, education itself must be viewed in a revolutionary context, in which political power is shifting from traditional to more modern educated groups.

¹All dates refer to the Gregorian calendar, and financial figures have been converted to U.S. dollars.

NATIONAL AND HUMAN RESOURCE DEVELOPMENT

Development Plans

The First Five-Year Plan. Ethiopia's First Five-Year Plan, the joint effort of the Imperial Planning Board and various government ministries, covered the period 1957-62. It placed greatest emphasis on the development of infrastructure. The plan anticipated a total investment of \$255 million, of which 35.6 per cent was allocated for transport and communications; 20.5 per cent for industry, mining, and power; 27 per cent for agriculture; and 8.5 per cent for the social services (education, health, and community development). The actual total investment exceeded the anticipated figure by 24 per cent, but the actual investment in the social services fell short of the already low target by 35 per cent.

During the planning period, per capita national income rose from \$36 to \$39, or 1.7 per cent a year. Although this progress could hardly be considered spectacular, the government planners saw a "promising outlook for the future" because the economy was no longer stagnant.¹

The Second Five Year Plan. In 1962 a Second Five-Year Development Plan was drawn up, covering the period 1962-67. This short-term plan was based on a twenty-year strategy for economic and social development for 1962-1981. During this twenty-year period it is estimated that Ethiopia's population will rise from 22 to 30 million.

Although the majority of these people are engaged in agriculture, as in all underdeveloped countries, the second five-year plan estimates a decline in agricultural employment from the present 90 per cent to 72 per cent by 1981. Although the plan foresees that agriculture will still make the largest contribution to the national product, it also anticipates a sizable push in the mining, manufacturing, and power industries and, consequently, a

¹Imperial Planning Board, "Second Five-Year Development Plan, 1955-1959 E.C. (Draft)," (Addis Ababa: 1961).

shift in the population structure. The total investment envisaged in the plan is \$673.6 million, of which \$10.6 million -- 1.6 per cent of the total -- is allocated for education. Later assessments have raised serious questions concerning the validity of many of the targets of the second five-year plan.

Existing Manpower Planning Machinery

The National Planning Board. The Imperial Planning Board is the principal government planning agency. Several ministries, including the Ministries of Finance and of National Community Development, also are involved in the planning process. In theory the planning board serves as the central clearinghouse through which all development projects are channeled. An Imperial Planning Board Committee, whose chairman is the Prime Minister, formulates policy issues concerning national planning which are then presented to the Council of Ministers for decision. Although the planning board has prepared annual reports on the progress of the plan, these documents are not made public. The result is that the Second Five-Year Development Plan has not been updated since its inception in 1962, and the actual allocation of funds each year differs greatly from the priorities called for in the plan. Moreover, while all external aid is officially channeled through the Economic and Technical Assistance Board in the Ministry of Finance, there is apparently little effort to coordinate this foreign aid with the second five-year plan.

For these reasons, the Imperial Planning Board is relatively ineffectual, and the manpower planning machinery in Ethiopia is weak. However, this machinery may be improved as a result of several recent developments, all of which deal with the collection of better information on labor supply and demand.

Current Efforts to Collect Manpower Data

In June 1963 the ILO placed Robert Jones in the Labor Department to set up a manpower advisory committee which would collect

manpower data. For more than a year Jones was unable to make progress, but he now is hopeful that appropriate machinery will be established in the near future. He concludes that an adequate manpower information program should involve two bodies: the Manpower Research and Statistics Section of the Labor Department in the Ministry of National Community Development, which would collect and distribute all relevant data; and the Manpower Information Advisory Committee, which would use this data in formulating planning policy. This committee should include representatives from the Central Personnel Agency, the Central Statistics Office, the Confederation of Ethiopian Labor Unions, the Federation of Employers of Ethiopia, Haile Sellassie I University, the Labor Department, the Ministry of the Interior, and the Ministries of Finance, Commerce and Industry, and Education and Fine Arts.

Although both these proposed bodies have not yet been established at this writing, progress is being made in determining the country's manpower needs. The university has established a Development Committee, of which several subcommittees are studying problems of national development. One of these subcommittees is examining the manpower requirements of each sector of the economy and rewriting the high-level manpower survey (described below) that was completed at the university in the spring of 1964.

The government is the largest employer of trained manpower in Ethiopia. Manpower data for this sector of the economy is being assembled by the Central Personnel Agency, which is compiling data on the entire civil service in order to classify positions and set pay scales. Unfortunately, this information is confidential and was not made available to EWA.

Manpower Needs: An Assessment of Available Data

At the time that the Second Five-Year Development Plan was drafted, no manpower study had been made in Ethiopia. The Imperial planning Board made rough estimates of manpower requirements. After the plan was drafted, the Ethiopian government asked

UNESCO to provide a mission to study the country's need for investment in education. A team of four, led by R. A. J. van Lier, was in Ethiopia in late 1962, and its report was published in March 1963.¹ The task of the mission was to study the manpower requirements for the development of the country, to estimate the output of the educational system, and to propose a program of investment that would enable the school system to produce the needed manpower.²

The UNESCO mission used the targets established and officially accepted in the Second Five-Year Development Plan. While acknowledging the lack of adequate data, the mission declared that the manpower requirements stated in the plan would have to be taken as a starting point for computing the size of the educational system which will be needed to meet them and that these estimates are reasonably reliable. The plan data, however, is generally agreed to have been without basis and consequently has not been used in this report.

The Zack Study. No further estimates of manpower needs in Ethiopia were made until the spring of 1964, when the economics department at Haile Sellassie I University undertook a high-level manpower survey.³ The director of the survey was Arnold Zack, an American in Ethiopia on a Fulbright grant; he was assisted by several faculty members and students.

The Zack study surveyed an estimated 90 per cent of Ethiopia's high-level manpower, and by calculating wastage and growth was able to project needs in the various categories as of 1972.

¹UNESCO, Educational Programming Investment Mission, "Report on Investment in Education in Ethiopia, September - November, 1962."

²R. A. J. van Lier, "Report to UNESCO on Mission to Ethiopia, 14 April - 16 May, 1964" (Paris: UNESCO, May, 1964), p. 23.

³"Ethiopia's High-Level Manpower: Analysis and Projections," report prepared by Arnold M. Zack (Addis Ababa: Haile Sellassie I University, July, 1964).

Zack concluded that there will still be a shortfall of about 4,900 high-level personnel in Ethiopia by 1972. He found that in such categories as veterinarians, biologists, and animal scientists the demand is relatively unlimited but that in order to determine priorities among various sectors, relative increases can be estimated in proportion to increases in the gross domestic product. Aware that other developing countries are apparently faced with a surplus of lawyers, Zack noted that the problem is primarily one of quality rather than quantity. Taking a similar look at the demand for librarians, he pointed out that for some time to come it will be less expensive to meet the small numerical requirement by sending Ethiopians overseas for training or by hiring foreigners.

Through interviews with many observers, however, the EWA study committee concluded that Zack had neither the time nor the necessary data to do an adequate job. The committee was strongly advised not to use Zack's quantitative conclusions, which are not accurate enough for detailed planning.

Assignment of Priorities

Since the university subcommittee examining manpower requirements is working with the Labor Department to refine Zack's estimates and the Central Personnel Agency is compiling data on the civil service, the next important step is for a comprehensive survey to put all these elements into some overall assessment of the country's future manpower requirements. At this writing AID is negotiating for such a study. If any further detailed research is to be undertaken, it should supplement current efforts by concentrating on other sectors, such as agriculture and industry.

It can be assumed that manpower needs resulting from pressures for Africanization will be in the nongovernmental sectors of the economy. Except for the brief period when Ethiopia was under Italian rule, Ethiopians have entirely staffed their own civil service; but in the private sector Italians, Armenians, and other foreigners have maintained a dominant position. At present, for example, only 11 per cent of the country's 331 physicians and 7 per cent of the dentists are Ethiopians. Similar imbalances exist in other fields.

EDUCATIONAL CAPABILITIES

The Planning and Financing of Educational Development

His Imperial Majesty, Haile Sellassie I, heads both the Imperial Planning Board and the Ministry of Education. This dual responsibility is evidence of the Emperor's strong personal concern for education, which has been the moving force behind educational development in Ethiopia. At the same time, this assumption of a dual responsibility contributes to the over-centralization that is characteristic of the country's administration and slows down the planning and implementation of policy.

As indicated above, the Second Five-Year Development Plan allocated \$10.6 million for education, 1.6 per cent of the total planned investment. While this percentage is relatively small, the amount of recurrent appropriations has been even smaller. The Ministry of Education has been hampered by the fact that money actually made available each year falls short of the amount allocated in the budget. For example, of the total education budget of \$9.9 million in 1962-63, only \$8.2 million was made available.

Nonetheless, Ethiopia has made dramatic strides in expanding and improving its educational system in recent years, and the Ministry of Education and Fine Arts is formulating comprehensive plans for future developments. In an effort to adapt the educational system to Ethiopia's development needs, the ministry is shifting from an 8-4 to a 6-2-4 pattern and making significant changes in the curriculum.

In March 1964 Ethiopia made a request to the International Development Association for a loan for primary, secondary, and teacher education, which is pending as this report is written. The outcome of the negotiations will, of course, determine in considerable measure the nature of educational developments in the period ahead.

Primary and Secondary Education, 1963-1968

Although the school census for 1963-64 was not available at this writing, it is possible to determine present enrollments and project future expansion by using data from a variety of sources. The figures cited below should be considered tentative. Table 1 shows enrollments as the percentage of population in each age group.

Since the wastage rate in the elementary schools has been nearly 80 per cent from grades 1 through 6, the flow into grade 7 (junior secondary level) must be increased before any substantial expansion at the secondary and higher levels can be achieved. In the Ministry of Education's plans, great emphasis is placed upon improving the holding power of the elementary system. As Table 2 indicates, the full impact of this change will not be felt at the junior secondary level until 1968-69, when 64,688 students will leave grade 6, an increase of roughly 90 per cent over the previous year.

TABLE 1

1963-64 SCHOOL ENROLLMENT COMPARED WITH POPULATION AND ADDIS ABABA
CONFERENCE TARGETS

(It is assumed that the grades correspond to annual age groups beginning at age 7)

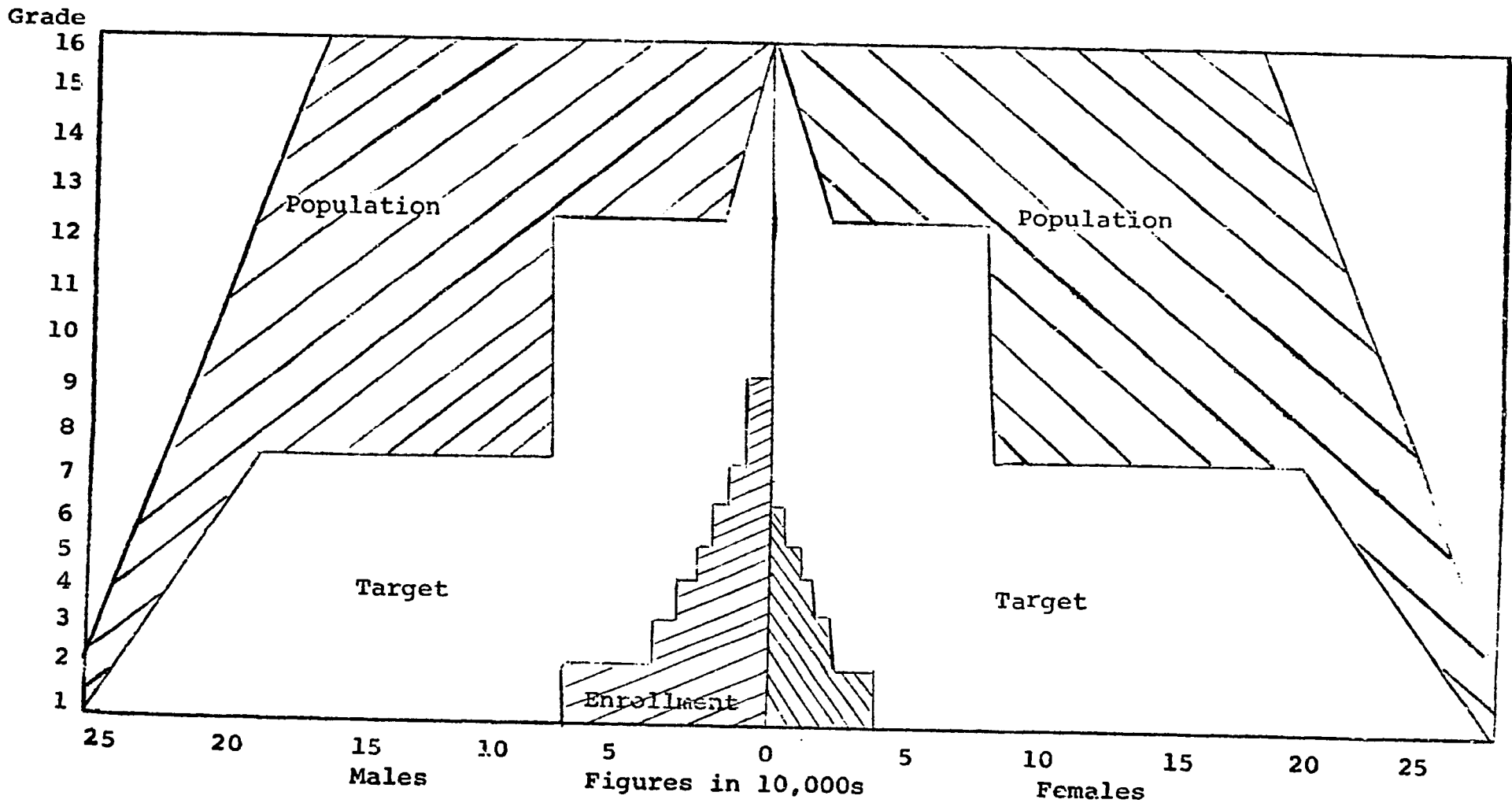


Table 2 shows the distribution of the 1962-63 enrollment among the types of schools.

TABLE 2
PERCENTAGE DISTRIBUTION OF STUDENTS ENROLLED,
1962-63

Level of Education	Percentage
Primary Schools (grades 1-4)	77.2%
Primary Schools (grades 5-8)	17.7%
Academic Secondary Schools	31.0%
Special Secondary Schools	1.79%
Institutions of Higher Learning	0.39%
Type of School	Percentage
Government Schools	69.7%
Mission Schools	9.9%
Private Schools	9.5%
Community Schools	7.4%
Church Schools	3.6%

At the elementary level, enrollment is projected to expand as shown in Table 3:

TABLE 3
PROJECTION OF ELEMENTARY ENROLLMENT,
COMPLETE AND INCOMPLETE GOVERNMENT SCHOOLS^a (GRADES 1-6),
1963-64 THROUGH 1968-69

Grade	Base Year 1963-64 ^b	1964-65 ^c	1965-66	1966-67	1967-68	1968-69
1	107,982	112,293	119,091	128,038	138,180	151,668
2	54,194	82,169	96,549	106,464	118,324	129,442
3	36,581	48,318	76,692	91,627	101,967	113,973
4	27,593	31,855	45,337	72,563	88,122	98,559
5	18,242	21,519	28,931	42,043	68,303	84,652
6	13,016	15,540	19,309	26,904	34,044	64,688
TOTAL	257,608	311,694	385,909	467,639	548,940	642,982

^aIncomplete schools are those having less than six grades.

^b1963-64 enrollments are figures supplied by the ministry. (About 90 per cent of the schools reported; enrollments for the remaining 10 per cent are projected.)

^c1964-65 to 1968-69 enrollments are based on the numbers expected to be promoted to the next grade. It is also expected that about one-quarter of the potential dropouts will be repeaters.

Note also:

1. Overall survival rate projected from grade 1 to grade 6 is about 60 per cent as compared with the present 20 per cent.
2. Number of classrooms are determined by an average of 50 students per class unit.
3. Source: Ministry of Education and Fine Arts, Control Plan for the Expansion of Elementary Enrollment in Government Schools (Grades 1-6) (Addis Ababa: 1964).

At the secondary level, enrollment is projected to expand as follows:

TABLE 4
PROJECTION OF SECONDARY ENROLLMENT

Type	1964-65	1965-66	1966-67	1967-68
Jr. Secondary	22,721	25,083	31,853	42,917
Sr. Secondary	15,411	17,924	20,765	23,105
Primary Teacher Training	1,797	2,344	2,537	2,454
Polytechnic	500	750	1,000	1,400

The projected output of these secondary schools, shown below, is based on a low wastage rate.

TABLE 5
NUMBER OF SECONDARY SCHOOL LEAVERS, 1964-65 THROUGH 1967-68,
BY TYPE OF SCHOOL

Type	1964-65	1965-66	1966-67	1967-68
Junior Secondary ^a	10,405	11,819	12,609	18,280
Senior Secondary ^b	1,524	1,815	2,342	2,469
Primary Teacher Training ^c	990 (0)	1,373 (921)	1,525 (1,025)	1,634 (1,134)
Polytechnic ^d	0	0	344	441

^aJunior Secondary includes grades 7 and 8. Figures indicate eighth grade enrollment.

(continued)

^bSenior Secondary includes grades 9 through 12. Figures indicate twelfth grade enrollment.

^cUntil recently there were a wide variety of primary teacher training colleges. These are now being consolidated into a uniform course of two years of training following the completion of the tenth grade. Figures in parentheses indicate this new type, while the totals include holdovers of the old types. In 1966-67 and 1967-68 the totals include 500 emergency teachers who will receive one year of training following the eleventh grade.

^dThe polytechnic institutes are new; their first graduates will finish in 1966-67.

The Quality of Primary and Secondary Education

Of far greater importance than the number of students finishing schooling is the quality of the education they receive. Although the situation has improved since 1962 when the UNESCO mission surveyed the educational system, the same basic weaknesses outlined in their report still prevail. These are:

1. The small size of the system. As Table 3 illustrates, the estimated proportion of the age group enrolled at various levels is very small: approximately 5.5 per cent in grades 1 through 8, less than 0.5 per cent in grades 9 through 12, and less than 0.09 per cent in higher education.
2. The high dropout rate. Roughly 50 per cent between grades 1 and 2 drop out, and there is a corresponding disproportion of enrollment between primary and secondary schools. Secondary enrollment is only nine per cent of primary enrollment.
3. The irregular age distribution of pupils. Despite the lack of complete data, it was evident that the median age in primary schools was several years above the expected normal age.
4. Poor geographical distribution of schools. As might be expected in a country with poor communications, most schools are located in Addis Ababa and a few other cities. Although Addis Ababa has only 2 per cent of the country's population, its residents occupy 13 per cent of all places in primary schools and 39 per cent of all places in secondary schools.

5. The low pupil-teacher ratio. For grade 1 the average was 1 teacher to 58 students, and classes of over 100 were not uncommon in the primary grades.

6. The low percentage of girls. As in other developing societies, the proportion of girls declines from 23 per cent in grades 1 through 8 to 12 per cent in the fourth year of higher education.

7. The high proportion of students in nongovernmental schools. Many of these schools are outside the jurisdiction of the Ministry of Education and need not follow the ministry's curricula. This proportion is roughly 20 per cent, though it varies with the grade level.

8. The poor results of the Ethiopian School-Leaving Certificate Of the 1,482 candidates -- among them 861 full-time secondary school students -- who sat for the examination in 1962, only 108 or 12.5 per cent of the candidates passed. It is probable that responsibility for this low achievement rests with both the examiners and the school system; but at any rate, the two should be brought more closely in line.

9. Insufficient production of the secondary school pipeline. The Ethiopian educational system does not supply enough twelfth grade-leavers of adequate quality for both higher education and middle-level job requirements. Despite the high rate of failure to receive the Ethiopian School-Leaving Certificate, roughly 43 per cent of the twelfth grade-leavers go on to higher education. This not only raises serious questions with regard to the quality of those enrolled in higher education but also is responsible for the small reserve of twelfth grade-leavers for middle-level jobs. Of course, the basic problem is the relatively small number and poor quality of students who even reach the twelfth grade.

Curriculum Development in Primary and Secondary Education

The Two-Language Requirement. The problems of language are serious and affect the quality of instruction in Ethiopian schools. The Ethiopian child has to master Amharic -- a language which is foreign to the majority of the population -- as the medium of instruction in the primary grades and then switch to English in the seventh grade. Although Amharic has the cultural and political advantages of being an Ethiopian national language, it suffers from a lack of competent teachers and high-quality textbooks. While acknowledging that the shift to

English has been made more difficult by this second language requirement, many Ethiopians point to the way in which Israel has developed Hebrew as a national language and look to the time when Amharic can be used in the secondary schools and even the university. However, this two-language plan has meant that the teaching of English and the students' comprehension of the language are often poor.

The Addition of Vocational Training. In the junior secondary schools, grades 7 and 8, students concentrate on English and combine a normal academic program of arithmetic, science, and other subjects with "vocational exploration": exposure to agricultural work, industrial arts, or home economics.

At the senior secondary level, grades 9 through 12, the curriculum is being expanded so that all schools will offer courses in one or more practical subjects -- commercial, agricultural, industrial, or home economics courses. Although some schools will continue to specialize in one or another of these areas, all new schools will be multipurpose. USAID has encouraged this development and is contributing considerable equipment for the practical subjects, and Ethiopian officials are wholeheartedly supporting the broadening of the secondary schools' curriculum to provide vocational skills.

The Supply of Teachers

The supply of teachers plays a critical role in any nation's educational development, and from available evidence it is clear that the supply in Ethiopia is not adequate.

In connection with an application for an IBRD/IDA loan for the expansion of primary, secondary, and teacher education, the Ministry of Education has calculated how many teachers will be required to accomplish the projected expansion. At the various levels the needs by 1967-68 will be:¹

1. Elementary teachers: 6,265.
2. Junior secondary teachers: 898 academic,
309 practical (including
94 industrial, 69 commercial
59 agricultural, and 87
home economics).

¹The figures for elementary teachers refers to new needs, while the junior and senior secondary figure refer to total needs, including some already teaching.

3. Senior secondary teachers: 602 academic,
209 practical (including 88
industrial, 63 commercial,
and 28 agricultural).

Roughly 40 per cent of the primary teachers have had no training at all. Until recently there were a wide variety of primary teacher training colleges, but, as noted above, these are now being consolidated into a uniform course of two years of training following completion of the tenth grade. Despite the ministry's emergency program, which consists of one year of training following the eleventh grade, the projected supply of 5,522 teachers is still short of the estimated 6,265 teachers needed by 1967-68.¹

The shortage of teachers at the secondary level is even more serious. Secondary schools remain heavily dependent upon expatriate teachers. The recent expansion of these schools, however, has been greatly aided by the services of nearly 400 Peace Corps Volunteers. Taking the growth of general secondary and special schools² between 1961-62 and 1963-64, when student enrollment increased by 48 per cent over the two years, teaching staff increased by 74 per cent. Peace Corps Volunteers accounted for 73 per cent of this increase.

Programs in the University's Faculty of Education. Haile Sellassie I University is described below, but in connection with supply of teachers reference to its Faculty of Education is appropriate at this point. This faculty has recently submitted its own expansion plans as part of an approved UN Special Fund project. The following table of projected enrollments was compiled November 5, 1964; the expansion necessary to accommodate such increased enrollments has probably not yet been entirely financed.

¹"Haile Sellassie I University: Reconnaissance Study, 1963-64," prepared by Robert LaFollette.

²A special school is defined as one that has at least one practical stream, such as agricultural, technical, commercial, or teacher training.

TABLE 6

HAILE SELLISSIE I UNIVERSITY, FACULTY OF EDUCATION
CURRENT ENROLLMENT WITH PROJECTIONS THROUGH 1970

Secondary Degree	1964-1965	1965-1966	1966-1967	1967-1968	1968-1969	1969-1970
1st Year	130	150	175	225	275	325
2nd Year	37	100	115	130	170	205
3rd Year	11	35	95	110	125	160
University Service	18	11	33	90	105	120
4th Year	1	18	11	33	90	105
TOTALS	197	314	429	588	765	915
Junior Secondary						
1st Year	24	100	125	150	175	200
2nd Year	26	17	70	88	105	122
TOTALS	50	117	195	238	280	322

The Ethiopian University Service was established in September 1964 by the university in an effort to instill a sense of national purpose in the educated elite. Under this program all university students are required to serve the country in some capacity between their third and fourth years. Most observers have been impressed with the students' increased awareness of national problems after their year spent outside of Addis Ababa. Since the overwhelming majority of the University Service students teach for their required year, this annual figure, together with a number of students from the other faculties, can be added to the total number of graduates available as teachers.¹

In addition to the above programs, the Faculty of Education has a four-year elementary degree program, which trains tutors for teacher training schools; a one-year diploma course for directors and supervisors; and a two-year diploma course to train physical education specialists who will assist elementary teachers. The projected enrollment of these programs is as follows:

¹ Although it is still too early to evaluate the real impact of the EUS, several studies are underway at the College of Business Administration.

TABLE 7

HAILE SELLIASSIE I UNIVERSITY
ENROLLMENTS IN
FACULTY OF EDUCATION
PROGRAMS

Elementary Degree	1964-1965	1965-1966	1966-1967	1967-1968	1968-1969	1969-1970
1st Year	39	75	100	125	150	175
2nd Year	15	30	60	80	100	120
3rd Year	5	14	28	58	75	95
EUS	0	5	12	25	50	65
4th Year	0	0	5	12	25	50
TOTALS	59	124	205	300	400	505
In-service Directors & Supervisors:						
TOTALS	83	100	100	100	100	100
Physical Education:						
1st Year	23	35	50	70	90	100
2nd Year	8	16	26	38	53	70
TOTALS	31	51	76	108	143	170
GRAND TOTALS	420	706	1,005	1,334	1,688	1,012

According to Dr. Mulugeta, the American-trained dean of the Faculty of Education, the key to the success of these plans lies in the continued feeding of high-quality students into these programs. The feeder for the elementary degree program is a short-term summer program in which four to five hundred teachers receive in-service training. The top ten per cent of these are selected for the elementary degree program.

The laboratory school, a special school attached to the Faculty of Education for which the top students are selected from across the country after the eleventh grade, serves as the feeder for the secondary program. Since their twelfth year is completely subsidized and they are exempt from the dreaded Ethiopian School-Leaving Examination, students willingly sign the contract to become secondary teachers upon completion of their degree. However a variety of other institutions skim off many of the best students from the tenth and eleventh grades into military, technical, and other middle-level skills. Without questioning the need for middle-level personnel, many observers felt that some high-quality students were being diverted from regular university programs by the laboratory schools and other institutions.

The Need for Peace Corps Teachers. Ideally, aside from replacing existing volunteers, the Peace Corps should not have to increase its numbers in general secondary schools. However, the need for teachers of practical subjects will continue to be very serious, and it is expected that the Peace Corps will increase its numbers dramatically, particularly in the practical subjects.

Technical and Vocational Education

Technical Education. In Ethiopia technical education takes place at three levels:

1. At the first level two to four years of craft training following the eighth grade are offered at trade institutes. In Ethiopia, as in several other African countries, there is considerable dissatisfaction with this craft training due to its inferior teachers, students, and equipment. It is likely that these institutes will decline in importance as the general secondary schools broaden their curriculum.

2. At the middle level technicians are being trained at polytechnics which provide three- and four-year courses following the tenth grade. Plans call for shifting this to three years following the eleventh grade.

3. The third level is the training of technologists which takes place in the Building College and science faculties at Haile Sellassie I University.

At this writing, Ethiopia is awaiting a joint report by UNESCO and the ILO, the "Ross-Young Report," which is a survey of the country's needs in technical education.

Agricultural Training. At Ethiopia's level of development it is clear that agriculture will remain the principal occupation and source of national income for many years to come. Through a large contract with Oklahoma State University (OSU), USAID has been assisting agricultural education at both the secondary and post-secondary levels. Although Alemaya College has been elevated to a degree-granting institution, producing over 40 graduates annually, there is widespread feeling among both Americans and Ethiopians that these graduates are not effectively utilized and that the OSU contract has not produced sufficient results to justify the large long-term effort. A recent study by Vincent M. Barnett Jr. and Paul G. Clark urged that AID shift its emphasis from support of long-term projects, such as infrastructure which can look to other sources for support, to projects which can increase short-term productivity in the monetary economy. The report concluded that the two highest priority sectors for further investment in the Ethiopian economy are agriculture and education (including agricultural education). In agriculture, Barnett and Clark urged greater emphasis on livestock production and animal husbandry.

In-Service Training. Programs for in-service training and upgrading employed manpower are less developed in Ethiopia than in many other African countries. Several ministries other than the Education Ministry have important programs within their particular fields. These include:

- Agriculture - secondary and higher agricultural education
- Interior - police schools
- Post, Telegraph and Telephone - communications training
- Public Health - public health training
- War - military service institutions.

Civil Service Training. The Imperial Ethiopian Institute of Public Administration provides in-service training for the civil service. During its seven years of existence, the institute has passed 1,130 through its courses which range from two weeks to four months. Training is offered for all levels from clerk to director general, and the United Nations Technical Assistance

Board has provided several staff members. Selection of those to be trained was taken over from the separate ministries by the Central Personnel Agency, which arranges the remuneration of trainees while on leave from their regular jobs.

The USAID Participant Training Program. The training of carefully selected individuals overseas in fields related to their occupations or professional assignments is making a substantial contribution to improvement of the manpower resources of Ethiopia. The largest undertaking in this category has been the AID participant training program. From 1951 to 1963 inclusive, 364 participants were sent to the United States by AID, and in addition 385 Ethiopians were sent to third countries for training, as indicated by the following table.

TABLE 8

AID PARTICIPANTS SENT FOR TRAINING^a
(Up to and including FY 1963)

Field	U.S.	3rd Country	Total
Agriculture	37	98	135
Aviation	33	0	33
Business Administration	0	25	25
Communications Media	11	0	11
Education	121	68	189
Engineering & Public Works	13	6	19
H.S.I.U. ^b	63	32	95
Mapping & Geography	4	0	4
Malaria Eradication	1	19	20
Public Administration	28	52	80
Public Health	29	85	114
Public Safety	24	0	24
TOTALS	364	385	749

^aWhen a person participates in more than one program, he is counted once for each program.

^bPresumably individuals assigned to Haile Sellassie I University as teachers.

In Ethiopia AID has worked closely with the appropriate ministries in the selection of participants, rather than going through the Ministry of Education. Participants, moreover, have been drawn from a wide range of fields.

Haile Sellassie I University

This institution was established in Addis Ababa by Imperial Charter in 1961, combining six existing institutions of higher learning. A total of six million dollars for capital expenditure for the university -- more than half of which was expected to come from external sources -- was allocated in the Second Five-Year Development Plan. Since its establishment, the university has increased its enrollment from 948 full-time students in 1961-62 to over 1,700 in the current academic year. The following table gives an indication of registration as of October 16, 1964.

TABLE 9

HAILE SELASSIE I UNIVERSITY REGISTRATION STATISTICS
FOR THE FIRST SEMESTER, ACADEMIC YEAR 1964-65

Teaching Units	1st	2nd	3rd	4th	5th	Special	Total	EUS ^a	Grand Total
Agriculture	47	46	48	...	...	...	141	55	196
Arts	123	78	46	13	...	9	269	21	290
Building	47	35	...	23	...	...	105	2	107
Business Administration	104 ^b	64	21	1	...	...	190	14	204
Education	313 ^b	84	16	1	...	...	414	17	431
Engineering	62	35	4	50	36	...	187	13	200
Public Health	31	21	13	11	...	...	76	...	76
Law	30	38 ^c	...	...	...	...	68	...	68
Medicine	...	12	2	3	...	...	17	3	20
Science	72	31	15	7	...	9	134	6	140
Social Work	8	14	...	...	...	...	22	...	22
Theology	7	6	3	...	...	...	16	4	20
TOTALS for each year	844	464	168	109	36	18	1,639	135	1,774

^aEthiopian University Service: This is a program in which all students between their third and fourth year are required to serve the country in some capacity (most as secondary teachers).

^bJr. Sec. 25
 Phys. Ed. 26
 Dir. Course 83
 Elem. I 39
 Sec. I 140
 Total 313

^c20 full-time
18 part-time
 38

In addition, the total enrollment at seven extension centers was 2,669 in 1963-64.

Expansion of University Enrollment. Due to the uncertainties of student enrollment, staffing of faculty, and particularly financing of development, long-term projections of university enrollment can only be estimated. Edward De Los Myers, the academic vice president of the university, declined to engage in such prophesies; but for the less cautious, several estimates are available. The UNESCO report of 1963 made projections of the expected output of higher educational institutions within Ethiopia and overseas from 1962-63 to 1966-67.¹

In the spring of 1964 Robert LaFollette, the higher education adviser of USAID, did a reconnaissance study of the university as the first stage of a large-scale feasibility study on the expansion of the university's facilities.² The study contains a wealth of information about the university, such as home cities of students (50 per cent are from Addis Ababa), placement of graduates, costs per student, staff characteristics, and projected first year enrollments from 1963-64 through 1968-69. These projections were made by the registrar's office on the basis of existing rates of wastage within the secondary schools and the results of school-leaving examinations.

¹UNESCO, Educational Programming Investment Mission, "Report on Investment in Education."

²"Haile Sellassie I University: Reconnaissance Study, 1963-64."

TABLE 10
PROJECTED FIRST YEAR ENROLLMENT IN VARIOUS FACULTIES,
HAILE SELASSIE I UNIVERSITY

Colleges or Faculties	1963-64	1964-65	1965-66	1966-67	1967-68	1968-69
College of Agriculture	59	60	60	60	60	60
Faculty of Arts	125	150	180	215	255	310
Building College	48	50	50	50	50	50
College of Business Adminis.	101	150	175	200	225	250
Faculty of Education ^a	151	435	505	600	720	840
College of Engineering	66	70	72	75	80	85
Faculty of Medicine ^b	15	15	15	15	15	15
Faculty of Law ^c	20	20	20	20	20	20
Public Health College	33	35	35	35	35	35
Faculty of Science	48	55	65	75	85	95
School of Social Work	16	15	15	15	15	15
Theological College	10	15	15	15	15	15
TOTALS	692	1,070	1,207	1,375	1,575	1,790

^aIncludes nondegree students.

^bIncludes ten students in first year science who may be expected to major in pharmacy and premedical students, five of whom are now studying at the American University in Beirut.

^cRecruited after the completion of at least second year arts study.

Problems of University Development. The most urgent problem in university development, lack of funds, reached crisis proportions in February when a directive was issued that cut back all noninstructional staff, expenses for books and other materials, travel allowances, and other expenditures. The lack of funds is related to the shortage of students, not only in the wastage rate (discussed below) but in the low student to staff ratio of roughly 6:1. This ratio ranges from less than 1:1 in the Faculty of Medicine to 27:1 in the Faculty of Education.

Toward Better Use of Existing Facilities. Although every faculty is pressing for additional staff, it is clear from the high cost per student, averaging roughly \$6,700, that a large increase in student enrollment is possible with relatively small increases in faculty strength. In order to achieve some semblance of balance among the different faculties competing for the limited supply of students, the university has had to allocate students. Because adequate data on the manpower situation was lacking, these decisions have been of an ad hoc nature, but discussion of how to make the allocation more rational is now going on.

Another aspect of the problem of efficient utilization of facilities is the rate of wastage. According to LaFollette, the average retention rates of the various colleges of the university are 85 per cent between the first and second year, 77 per cent between the second and third year, and 93 per cent between the third and fourth. This means that the overall retention rate is 60 per cent for all four years. Apparently, the primary reason for the wastage is financial, because the students find it impossible to get by on the \$20 per month living allowance. After boarding facilities were abolished in 1961, the situation steadily worsened. Provision of cheap hostels by the university would alleviate the situation.

The Need for Long-Range Planning. Perhaps the university's greatest problem has been the lack of long-range planning. The government provides budget support only one year in advance. The Ford Foundation is providing a three-man team to advise on university planning. C. Grove Haines, A. J. Lehmann, and Fred C. Cole have been given the broadest possible frame of reference, and after each has submitted separate reports, they planned to meet in July 1965 to work out recommendations.

In spite of the limitations cited above, R. A. J. van Lier and Jack Masee, the two UNESCO experts who worked on Ethiopia's application for the IBRD/IDA loan, were optimistic about the country's educational future. The consensus of these observers seemed to be that although Ethiopia has a very long way to go, present educational plans point in the right direction and the country is determined to get there.

OVERSEAS STUDY

A significant addition to Ethiopia's limited supply of high-level manpower is the annual return of some 250 students from overseas. Although complete statistics are not available, it appears that more than 1,000 Ethiopians are studying a wide variety of subjects in some 25 countries. The Scholarship Department of the Ministry of Education and Fine Arts tabulates outgoing students by country and field of study but keeps no records of returnees, so that a complete count can only be estimated by drawing upon different sources.

Responsibility for Selection of Students to Study Abroad

Responsibility for the selection of students falls under the Scholarship Department of the Ministry of Education and Fine Arts. According to the director of this department, most donors make a genuine effort to fit their programs to Ethiopia's needs. Decisions about the utilization of offers are made by the Scholarship Interministerial Committee, which is chaired by the assistant minister of education. Also represented on the committee are the Central Personnel Agency, the Imperial Planning Board, the Economic and Technical Assistance Board of the Ministry of Finance, the university, the Ministries of Public Health, Agriculture, Commerce and Industry, and the Department of Labor in the Ministry of National Community Development.

Once a program is defined, the Scholarship Department advertises for persons with the necessary educational qualifications. Each applicant must fill out detailed forms giving his personal and educational background, his reasons for applying for the particular scholarship, and his career plans. After the final selections have been made by the screening committee, the embassy of the donor country has the opportunity to review the list.

Unlike most other African nations in which training programs are administered separately from academic ones, all overseas study is under the jurisdiction of the Ministry of Education, unless it is for less than a year. In the latter case, the Central Personnel Agency is responsible for approving the project and selecting the trainees.

According to the Scholarship Department in the ministry, the African-American Institute has been extremely cooperative in trying to gear its scholarship programs to Ethiopia's needs so as not to compete with the university.

At the graduate level, the Fulbright Commission has brought a total of 32 Ethiopians to the United States since 1962. The executive secretary of the Ethiopian Fulbright Commission solicits applications from among university graduates and is satisfied that the performance of Ethiopians in the United States and upon their return has been very successful, due largely to the careful selection -- one of every ten applicants is chosen.

Statistics of Ethiopian Students Overseas

According to the Ethiopian Ministry of Education, the total number of Ethiopians studying abroad in 1962-63 was 1,074. The total number abroad for 1964-65 is probably about 1,250, although no accurate figures are available for countries of study other than the United States and the United Kingdom.

The Scholarship Department of the Ministry of Education gave a breakdown of Ethiopian students abroad as of August 1962 by country and field of study. This is shown in Table 11 below. It is assumed that this list includes both post-secondary and university students. The total number of students in the United States, according to the Ministry of Education, is 198. This figure is 27 higher than the figure given by Open Doors -- 171 -- for Ethiopians at U.S. universities during the same year; and yet the ministry figure of 78 students in the United Kingdom is 22 fewer than the British total of 110 students at both the post-secondary and university levels in 1962-63.

The Ministry of Education also made available a list of the number of students who went abroad for study between January and December 1964, by country and field of study (see Table 11), Open Doors lists only 81 new Ethiopian students in the United States for 1963-64, in contrast to the 109 listed by the Ethiopian statistics for the same year.

TABLE 11

ETHIOPIAN STUDENTS ABROAD BY COUNTRY
AND FIELD OF STUDY

Countries	Social Science	Engineering	Medical Science	Agriculture	Education	Humanities	Natural Science	Fine Arts	Military Science	Unclassified	Total
AMERICAS:											
U.S.A.	54	23	14	29	38	19	..	3	..	18	198
Canada	2	..	5	1	..	..	..	..	..	..	8
Jamaica	..	..	3	..	..	..	..	..	..	..	3
Mexico	..	1	1	2	..	..	..	..	..	..	5
Haiti	..	..	1	..	..	..	..	..	..	..	1
AFRICA:											
U.A.R.	17	1	65	8	4	..	..	..	..	..	95
Sudan	7	..	..	..	..	1	..	..	..	..	8
Congo	2	1	..	..	..	..	..	..	..	..	3
Tanganyika	..	..	..	..	..	1	..	..	..	..	1
ASIA & NEAR EAST:											
Israel	2	4	4	38	..	1	..	5	..	2	56
Lebanon	7	..	49	36	24	..	..	..	..	..	116
India	16	1	..	5	3	1	..	..	1	1	28
Japan	2	2	..	..	..	..	..	1	..	4	9
Pakistan	2	..	2	..	..	..	..	..	..	..	4
EUROPE:											
U.K.	26	3	6	2	33	4	1	2	1	..	78
France	21	12	16	2	2	4	2	1	..	..	60
Germany	19	37	7	14	6	5	1	12	1	2	104
Austria	..	..	1	..	..	..	..	1	..	..	2
Sweden	7	7	4	..	5	..	..	1	..	11	25

TABLE 11 -- Continued
ETHIOPIAN STUDENTS ABROAD BY COUNTRY
AND FIELD OF STUDY^a

Countries	Social Science	Engineering	Medical Science	Agriculture	Education	Humanities	Natural Science	Fine Arts	Military Science	Unclassified	Total
EUROPE: (continued)											
Denmark	..	..	1	2	2	..	..	..	..	..	5
Rumania	..	..	..	..	1	..	..	..	..	..	1
Finland	..	2	..	..	..	..	..	..	..	..	2
Italy	12	49	8	4	36	42	..	7	..	..	158
Portugal	..	..	..	..	..	1	..	..	..	..	1
Greece	..	..	1	1	..	9	..	..	..	..	11
Czechoslovakia	..	10	3	6	3	..	..	2	..	..	24
Poland	..	..	..	1	..	..	..	1	..	..	2
Yugoslavia	..	13	10	2	..	..	..	1	..	..	26
Switzerland	4	2	1	1	..	1	..	..	..	..	9
Belgium	..	3	1	..	..	..	..	..	..	1	5
Cyprus	..	..	..	..	..	..	..	1	..	..	1
Holland (Netherlands)	1	..	..	1	..	..	1	..	..	..	3
U.S.S.R.	2	11	1	3	2	..	2	..	..	..	21
Australia	1	..	..	..	..	..	..	..	..	..	1
GRAND TOTAL	204	182	204	158	159	89	8	38	3	29	1,074

^aOnly those students registered by the Ministry of Education and Fine Arts, as of August 1962.

TABLE 12

NUMBER OF STUDENTS WHO WENT ABROAD SINCE JANUARY 1964
BY COUNTRY AND FIELD OF STUDY

Countries	Humanities	Education	Engineering	Agriculture	Fine Arts	Social Science	Natural Science	Medical Science	Unclassified	Total
AMERICAS:										
U.S.A.	5	15	22	12	2	15	13	10	15	109
Canada	1	..	..	..	0	..	..	..	..	1
Philippines	..	..	..	..	..	..	..	1	..	1
AFRICA:										
U.A.R.	1	..	2	..	..	3	..	..	..	6
Nigeria	..	..	..	..	..	4	..	..	..	4
EUROPE:										
U.K.	1	..	2	1	..	4	1	6	2	17
France	..	2	8	1	..	9	1	9	..	30
Germany	..	..	6	..	..	2	..	..	..	8
Austria	..	..	..	..	..	..	1	..	..	1
Italy	7	..	9	2	..	2	2	1	..	23
Poland	..	..	4	2	4	2	..	..	..	12
Yugoslavia	..	..	18	1	..	..	..	..	..	19
Sweden	..	..	..	..	..	1	..	3	..	4
Holland	..	..	2	..	..	3	..	..	..	5
Czechoslovakia	1	1
Switzerland	1	1
U.S.S.R.	26	3	2	1	2	1	..	35
Hungary	..	5	5
Bulgaria	4	4
Armenia	4	..	4

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TABLE 12 -- Continued

NUMBER OF STUDENTS WHO WENT ABROAD SINCE JANUARY 1964
BY COUNTRY AND FIELD OF STUDY

Countries	Humanities	Education	Engineering	Agriculture	Fine Arts	Social Science	Natural Science	Medical Science	Unclassified	Total
ASIA & NEAR EAST:										
Israel	..	..	8	..	..	..	..	..	..	8
Lebanon	..	..	..	..	..	..	..	9	..	9
India	..	..	..	..	..	2	..	..	..	2
Japan	..	..	3	..	..	..	..	..	..	3
TOTAL	15	22	115	23	8	48	20	44	17	312

Students in the United Kingdom

The total number of Ethiopian students in university and other post-secondary courses in the United Kingdom was 126 in 1961-62; this dropped to 80 in 1963-64. The vast majority of these students were at the post-secondary level.

The statistics of the British Council and the Commonwealth Universities Yearbook are as follows:

	<u>University</u>	<u>Post-Secondary</u>	<u>Total</u>
1961-62	15 (5 graduate students)	111	126
1962-63	5 (1 graduate student)	105	110
1963-64	11 (3 graduate students)	69	80

At the university level students have been enrolled as follows:

	<u>1961-62</u>	<u>1962-63</u>	<u>1963-64</u>
Social Studies	8 (3 grad.)	1	3
Technology	3 (1 grad.)	2	4 (1 grad.)
Medicine	2 (1 grad.)	2 (1 grad.)	3 (2 grad.)
Arts	1	..	1
Pure Sciences	1	..	..

There have been no students in agriculture and forestry, dentistry, or veterinary sciences.

In 1961-62 ten students were known to hold awards; five had no known awards. The next year only four students held awards; one was not known to hold an award. In 1963-64 eight students were known to hold awards; three were unknown.

At the post-secondary level, Ethiopian students have been enrolled in the following fields:

	<u>1961-62</u>	<u>1962-63</u>	<u>1963-64</u>
Technical Colleges	17	14	14
Private Colleges & Other Institutions	52	26	16
Professional & Practical Training	4	43	32
Nursing	18	16	5
Inns of Court	17	..	..
Teacher Training	<u>3</u>	<u>6</u>	<u>2</u>
TOTALS	111	105	69

Students in the United States

According to the IIE Open Doors reports, the total number of Ethiopians studying in the United States has increased from 176 in 1961-62 to 220 in 1963-64 and 266 in 1964-65. Graduate students have formed a high proportion of the total.

	<u>Total</u>	<u>Graduate Students</u>
1961-62	176	84
1962-63	171	85
1963-64	220	100
1964-65	266	121

Most students have been enrolled in the social sciences, and then, in descending order, in the humanities, education, the physical and natural sciences, agriculture, medical sciences, business administration, and engineering.

	<u>1961-62</u>	<u>1962-63</u>	<u>1963-64</u> (Total)	(Graduate Students)
Social Sciences	42	49	61	26
Humanities	29	21	36	15
Education	30	25	33	20
Physical & Natural Sciences	16	18	23	11
Agriculture	18	14	11	9
Medical Sciences	11	14	15	8
Business Administration	11	13	16	5
Engineering	9	9	16	5

Sources of financial support are as follows:

TABLE 13

SPONSORSHIP OF ETHIOPIAN STUDENTS IN THE UNITED STATES

Sponsor	1961-62	1962-63	1963-64
U.S. Government	79	61	64
Private	36	17	24
Foreign Government	29	17	18
Self-Sponsored	6	13	19

TABLE 13 -- Continued

SPONSORSHIP OF ETHIOPIAN STUDENTS IN THE UNITED STATES

Sponsor	1961-62	1962-63	1963-64
U.S. College or University & Foreign Government	..	5	17
U.S. College or University	..	8	14
U.S. College or University & Private	..	10	10
U.S. College or University & U.S. Government	..	9	9
Private & U.S. Government	2	2	4
Private & Foreign Government	..	3	5

Most Ethiopians in the United States are sponsored by ASPAU, AFGRAD, the USAID participant training program,¹ and a variety of church-sponsored programs. (Students sponsored under these programs are included in the totals given in the table above.)

The ASPAU Program. The ASPAU program has sponsored 33 Ethiopian students in the United States since 1961. No students came in 1961-62, seven came in 1962-63, fifteen in 1963-64, and eleven in 1964-65.

One student was repatriated in January 1963 for medical reasons. One student has transferred from his original institution. Two students are expected to graduate in 1965, four in 1966, fifteen in 1967, and eleven in 1968.

The AFGRAD Program. Eleven Ethiopians have been sponsored by the AFGRAD program. Five were selected for 1963-64 for training in economics, physics, agronomy, mathematics, and engineering. Six are 1964-65 fellows. Two of these are in electrical engineering, one in public administration, one in development economics, one in public finance, and one in political science.

¹The participant training program was discussed on page 19.

Fulbright Grants. A total of 32 Ethiopian students have come to the United States for postgraduate work under the Fulbright Educational Exchange Program. Twenty-five are still studying in the United States, and seven have returned. Apparently, all returnees are working in positions that utilize the specialized training they received in the United States.

Programs of Church-Affiliated Groups. Since 1960 three Ethiopian students have been sponsored for two years each by the Church World Service under its Ecumenical Scholarship Exchange Program. These grants are for graduate or special theological students to study at U.S. seminaries. Scholarships are solicited from different seminaries on an annual basis; the Church World Service places students and pays their transportation.

The Church to Church Program of the Office of Leadership Development of the Presbyterian Church sponsored 25 Ethiopians in the United States or third countries during 1963-64. For the most part, students in this program are at the graduate level; the program seems to be carefully planned in relation to Africa's long-range needs and emphasizes that students must exhaust opportunities at home before going abroad. All scholarships are full scholarships; the universities provide tuition, room and board, and the Presbyterian Church provides transportation and additional allowances.

One Ethiopian had been sponsored by the Overseas Department of the Episcopal Church through 1963. Under this program, the student must be either a graduate or special student in a theological field who has done as much work as possible in his home country.

Problems of Overseas Study Programs

It is not surprising that Ethiopian university officials are opposed to undergraduate study overseas. In view of the limited supply of twelfth grade-leavers and the poor utilization of national university facilities, it is clear that overseas study competes with the local institutions. Although official policy limits scholarships to fields not available at home, this in fact merely guides the students to apply in those fields. The secretary of the Scholarship Department acknowledged that most undergraduate scholarships went to students already accepted by Haile Sellassie I University, whose first choice was to study abroad, and who found the \$20 per month living allowance at the university insufficient.

On the question of utilization of overseas study, several Ethiopians were critical of the donor's -- and particularly AID's -- insistence that returnees be placed in the precise position for which they were trained. Their argument was that since the overall need is so great, any educated person is of benefit to the country, regardless of what job he occupies. In an effort to encourage the Ethiopian government to be stricter in placing returned participants in the jobs for which they were trained, AID now requests reimbursement for the total cost of a person's training if the participant is placed in a job which does not fully utilize his training.

The Nonreturnee Problem

Few students go abroad without the knowledge of the Ministry of Education. Once they have left the country, however, the government loses track of them. In July 1964 the ministry sent three educational attachés to check on Ethiopians in the United States, Western Europe, and Eastern Europe. While this represents a step in the right direction, it is clear that the existing machinery is not yet geared to the problems of recording the location, field of study, and estimated date of return of Ethiopians overseas -- much less to keeping them informed of the job market and guiding them back into appropriate positions.

The policy as defined by the Scholarship Department is for students to return to Ethiopia after they receive the Bachelor's degree, except in fields such as statistics, where further study is essential. Government officials realize that students who stay abroad for over four years tend to lose touch with the realities of the employment situation in Ethiopia.

Financing Overseas Study

In a study of the comparative costs of producing secondary teachers in Ethiopia or overseas, it was demonstrated that the annual cost of training a teacher in Ethiopia ranged from \$1,720 to \$2,800, while the cost of training an Ethiopian overseas ranged from \$3,000 to \$3,400.¹ However, a factor which perhaps explains the Ethiopians' lack of concern for having many students go overseas, is that most of the expenses of many scholarships are borne by the donor nation. Similarly, the annual cost of a

¹Jeffrey B. Tener, "Cost of Obtaining Secondary School Teachers" (Addis Ababa: College of Business Administration, Haile Sellassie I University, 1964).

Peace Corps Volunteer is roughly \$8,400, but the Ethiopian government's share is only \$70 per month. Nevertheless, although scholarships overseas and the provision of expatriate staff may be short-term necessities, an effort should be made to prevent such forms of assistance from becoming a long-term crutch which enables the host country to postpone self-sufficiency.

The Need to Maintain a Registry of Students.

Clearly, the role of overseas study should be more closely geared to manpower needs. Since effective machinery already exists with regard to the selection and outward flow of students, the Scholarship Department would appear to be the logical place to keep an up-to-date registry of Ethiopians overseas. Periodic correspondence could maintain a record of students' locations, fields of study, and estimated year of return; this information could then be coordinated with current employment information to provide general career guidance.

MANPOWER BALANCE SHEET

Until adequate data on manpower requirements is available it will not be possible to assess the demand and supply equation with any precision. The only survey to date is the Zack study and, as indicated above, the survey's projected demand and supply of various categories of high-level manpower, is misleading.

Even though further data is needed, it is possible at present to identify areas of critical shortages in general orders of magnitude. Numerically, secondary school teachers are by far the largest single shortage, followed by government administrators. In such fields as law and agronomy, the problem is one of quality rather than of quantity. In almost every case it is clear that formal education at home or overseas will not produce enough to meet minimum requirements. As in most other developing countries, the greatest need for manpower is at the middle level, and in-service training programs must be vastly expanded to upgrade those presently employed. The school system must be expanded and improved to provide enough qualified secondary school-leavers for university education and for middle-level manpower needs.

CONCLUSIONS

The Need to Establish Priorities

The Education and World Affairs study committee's recommendations, listed on the following pages, are based on recognition of the need to establish development priorities within an integrated framework. Such a framework is necessary to provide an overall strategy of human resource development and to insure an effective AID assistance program in Ethiopia. The present AID program does not clearly reflect such a framework. Instead of a piecemeal approach to national development and assistance in response to individual requests, AID should plan its own development strategy for Ethiopia so that its supplementary assistance will be based on the appropriate selection of important sectors, programs, and institutions. The Agency must work out its own priorities as an external donor and be firm in its commitment to these priorities.

Assumptions

The development priorities established by the committee are based upon the following assumptions:

1. That continuous consultation with the appropriate agencies of the Ethiopian government will be necessary to insure that USAID's strategy is applied to Ethiopia's changing needs.
2. That the reduction of wastage and the improvement of the quality of primary and secondary education are essential for the development of intermediate- and high-level manpower in Ethiopia.
3. That existing studies on manpower needs and supply are insufficiently documented to serve as the basis for establishing detailed priorities. The UNESCO mission's report of 1963 is of questionable validity; the Zack study of 1964 is also of limited value and is being revised by a subcommittee of the University Development Committee; and the Central Personnel Agency has recently begun its own compilation of information on civil service. In conjunction with these efforts, a more comprehensive manpower survey will be important in the near future. Until such a survey is completed and in the absence of accurate data, the committee cannot with confidence establish priorities in all areas. However, it is possible to identify critical shortages and make recommendations to alleviate these shortages.

Priorities in Manpower Development

The greatest shortage in any category of Ethiopian manpower is secondary school teachers. Top priority should be given to meeting this need -- on a short-term basis through continued use of Peace Corps Volunteers and eventually through upgrading the quantity and quality of teacher training, as recommended below.

The second greatest shortage is government administrators. Therefore, the data compiled by the Central Personnel Agency and the capabilities of the Institute of Public Administration should be carefully considered in future planning.

A high priority should be assigned to the training of agricultural personnel, because productivity in this sector is essential to national development.

Lower priority should be given to the training of managers and skilled workers for manufacturing and industry, since the private sector is small, and the shift from agriculture to industry will necessarily be gradual.

Educational Capabilities

Middle-Level Manpower. The least adequate aspect of the Ethiopian educational system has been the secondary level. The educational pyramid that has developed in Ethiopia is too flat to supply the country's needs for middle- and high-level manpower. At present the secondary schools do not supply enough students either to fill the university's facilities or to meet the country's need for middle-level skills. This bottleneck in secondary education is directly related to the shortage of qualified teachers.

The committee considers the development of the secondary level crucial to an integrated plan of educational development. Not only quantitative expansion but qualitative improvements are called for. The Ethiopian government's introduction of a broadened secondary curriculum is one stage in this development. This curriculum, which combines liberal arts education and vocational training, will better prepare students for further studies or for immediate entry into middle-level occupations.

High-Level Manpower. The most highly developed educational facilities in Ethiopia are at the university level. Indeed, Ethiopia has concentrated a disproportionate effort on the development of its university as compared to the development of its secondary education-- which must provide the students qualified for university training.

The existing facilities at Haile Sellassie I University could supply most of the country's high-level manpower needs, if the university had capacity enrollment; but, in fact, student enrollment is very low. The university suffers from critical lack of recurrent funds; there is great need for external support in several areas, some of which are identified below.

The university's students constitute only a small fraction of the relevant age group, and most of this fraction come from a handful of cities. The remedy for this situation must be better training of teachers for the secondary schools and better preparation of students at the secondary level -- both of which might reduce the dropout rate at this level.

Recommendations

1. Support for a Comprehensive Manpower Study

The committee supports AID's effort to provide a comprehensive study that will incorporate and assess the manpower surveys currently being prepared by the Central Personnel Agency and the university subcommittee in conjunction with the Labor Department.

2. Encourage the Establishment of New Manpower Planning Machinery

Support should also be given to the establishment of new government planning machinery as recommended by the Department of Labor: a Manpower Research and Statistics Section in the Labor Department to collect and distribute data and an interdepartmental Manpower Information Advisory Committee to formulate planning policy. AID should encourage the coordination of these efforts at the highest level. If such coordination is achieved, direct USAID assistance should take the form of providing one or more advisers, if requested.

3. Assistance in Recruitment of Government Employees

Since the government is the largest employer of trained manpower and yet is not fully staffed, USAID should help the Central Personnel Agency to improve the system for recruitment and promotion in the civil service and should encourage coordination of these efforts at the highest level.

a. The appropriate assistance would be loaning of advisers to the Central Personnel Agency and improving communications with Ethiopians studying overseas.

b. The AID participant training program should be continued as an important means of upgrading the civil service.

c. These efforts should be coordinated with the registry of overseas students, described in recommendation #6.

4. Continued Assistance to Secondary Education and Teacher Training

The committee recommends that AID continue its present program of assistance to secondary education because the production of middle-level manpower is of the highest priority. Special emphasis must continue to be placed upon the training of secondary teachers, and in particular upon the training of teachers in technical and vocational skills. AID should continue to support the Faculty of Education at Haile Sellassie I University through the University of Utah contract.

5. Assignment of High Priority to Institutional Development at the University Level

a. Maximum Use of University Facilities

AID should make every effort to capitalize upon the existing university facilities by encouraging a moratorium on the worsening faculty-student ratio until present facilities are adequately utilized and by exploring ways to provide financial support for university students, in conjunction with efforts to improve the secondary school pipeline.

AID should also support the building up of key resources of Haile Sellassie I University but should discourage proliferation into high-cost low priority areas. The Faculty of Education deserves particular support in its plans to prepare secondary teachers. The committee also favors continuing the AID regional scholarship program but urges that the university be encouraged to improve the selection of students and the administration of the program.

b. Broaden the University's Service Role

AID should support university services outside the major cities. For example, at this writing there is some question as to whether the Ethiopian University Service and the extension program may be discontinued or cut back because of financial pressures. If this curtailment becomes necessary, USAID should support these important programs by which the university serves the empire outside the major cities.

c. Improvement of the Quality of University Education

USAID should help the university recruit first-rate expatriate faculty, but this support should be coordinated with efforts to increase the size of the student body, which, in turn, would reduce the present high student costs.

d. Establishment of a Registry of Overseas Students

Although selection of procedures for study abroad appear to be adequate, few records are kept of Ethiopian students enrolled in institutions overseas. The committee recommends that USAID encourage and support the Ethiopian government in setting up a registry to record the students' course of study, institutions, and estimated date of return. This data should be made available to the Central Personnel Agency, the Labor Department, the university, and other potential employers.

USAID should consider enlisting the services of U.S. universities in the collection of data on Ethiopian students in the United States.

7. Overseas Study and Scholarships

a. AID should continue its participant training program with Ethiopia. AID should also continue to encourage the Ethiopian government to place returned participants in specific jobs for which they were trained.

b. The ASPAU program, however, should be gradually cut back, and the funds thereby released should be allocated to scholarships or loans at Haile Sellassie I University or to graduate scholarships for specialized study in the United States under the AFGRAD program.

8. Changes in AID Operations

The committee concludes that AID assistance to the Ministry of Education can be most effectively provided by assigning technical assistance personnel directly to operational responsibilities rather than through an advisory mission located within the ministry. Accordingly, educational advisers who are not in close touch with operations should be located within the AID mission itself.

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